Contents Volume 56 (1991)

Vol. 56, No. 1 (February 1, 1991)

Editorial v
Enhanced nitrate ultrafiltration by cationic surfactant
G. Morel (Villetaneuse, France), A. Graciaa and J. Lachaise, (Pau, France) 1
Effects of protein fouling on the apparent pore size distribution of sieving membranes
M. Meireles, P. Aimar and V. Sanchez (Toulouse, France) 13
Momentum and mass transfer during ultrafiltration of dextran with tubular mineral membranes in turbulent flow regime
F. René and M. Lalande (Villeneuve d'Ascq, France) 29
The influence of nonionic and ionic surfactants on hydrophobic and hydrophilic ultrafiltration membranes
A.-S. Jönsson, and B. Jönsson (Lund, Sweden) 49
Surface fluorination of polysulfone asymmetric membranes and films
J.M. Mohr, D.R. Paul, I. Pinnau and W.J. Koros (Ausin, TX, USA) 77
Transport of electrolytes across charged membranes. Part IV. Frictional interactions of the neutral and alkaline permeants and the permeability/reflection phenomena
W. Kujawski and A. Narębska (Torun, Poland) 99
Letters to the Editor 113
Report Review 121
Meeting Announcements 123
Meetings Calendar 125

Vol. 56, No. 2 (February 15, 1991)

Recovery of citric acid from fermentation beer using supported-liquid membranes
D.T. Friesen, W.C. Babcock, D.J. Brose and A.R. Chambers (Bend, OR, USA) 127
Preparation of oxidatively stable cation-exchange membranes by the elimination of tertiary hydrogens
R.A. Assink, C. Arnold, Jr., (Albuquerque, NM, USA) and R.P. Hollandsworth (Palo Alto, CA, USA) 143
Synthesis and properties of noncyclic polyether compounds. XVIII. A noncyclic polyether carrier exhibiting magnesium ion-selective transport
K. Hiratani, K. Taguchi and H. Sugihara (Ibaraki, Japan) 153
Transport of amino acids and their phosphonic acid analogues through supported liquid membranes containing macrocyclic carriers. Experimental parameters
M. Bryjak (Wroclaw, Poland), P. Wieczorek (Opole, Poland), P. Kafarski and B. Lejczak (Wroclaw, Poland) 167
Non-isothermal water transport through membranes
J.M. Ortiz-Zárate, F. García López and J.I. Mengual (Madrid, Spain) 181

Competitive, proton-coupled, alkali metal cation transport across polymer-supported liquid membranes containing sym-(decyl)-dibenzo-16-crown-5-oxyacetic acid: Variation of the alkyl 2-nitrophenyl ether membrane solvent
P.R. Brown, J.L. Hallman, L.W. Whaley, D.H. Desai, M.J. Pugia and R.A. Bartsch (Lubbock, TX, USA) 195
Regenerated cellulose membrane from cuoxam/zincoxene blend
L. Zhang, G. Yang and W. Fang (Wuchang, P.R. China) 207
The permselectivity of polyorganosiloxanes containing ester functionalities
A.J. Ashworth, B.J. Brisdon, R. England, B.S.R. Reddy and I. Zafar (Bath, Great Britain) 217
Analysis of ion transport with fixed site carrier membranes (*Short communication*)
R.D. Noble (Boulder, CO, USA) 229
Meeting Announcements 235
Meetings Calendar 236

Vol. 56, No. 3 (March 1991)

Facilitated emulsion liquid membrane separation of complex hydrocarbon mixtures
N. Garti (Jerusalem, Israel) and A. Kovacs (Szazhalombatta, Hungary) 239
Electrophoretic elution and adsorption: Investigations using microporous membrane immunoadsorbents
W.C. Olson (Cambrige, MA, and Piscataway, NJ, USA), C.K. Colton (Cambridge, MA, USA) and M.L. Yarmush (Cambridge, MA, and Piscataway, NJ, USA) 247
Vapor and gas permeability of polyurethane membranes. Part II. Effect of functional group
K.H. Hsieh, C.C. Tsai and D.M. Chang (Taipei, Taiwan) 279
Water flux and protein adsorption of a hollow fiber modified with hydroxyl groups
M. Kim, K. Saito, S. Furusaki (Tokyo, Japan), T. Sugo and J. Okamoto (Gunma, Japan) 289
Separation of hydrogen through palladium thin film supported on a porous glass tube
S. Uemiya, N. Sato, H. Ando, Y. Kude, T. Matsuda and E. Kikuchi (Tokyo, Japan) 303
Hydrogen permeable palladium–silver alloy membrane supported on porous ceramics
S. Uemiya, T. Matsuda and E. Kikuchi (Tokyo, Japan) 315
Energetics of active transport in inverted membrane vesicles of *Escherichia coli*
M.H. Dung and Chang-Hwei Chen (Albany, NY, USA) 327
Unsteady facilitated transport of oxygen in hemoglobin containing membranes and red cells
S. Davis (Moffett Field, CA, USA) 341
Meeting Announcements 359
Meetings Calendar 360
Author Index Volume 56 (1991) 363
Subject Index Volume 56 (1991) 364